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| APPLICATION NO.  | FILING DATE   | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO.     | CONFIRMATION NO |  |  |
|--|---------------|----------------------|-------------------------|-----------------|--|--|
| 09/719,029   | 12/05/2000    | Jouni Rahkomaa       | 990.1246 3516           |                 |  |  |
| 21831 75   | 90 06/21/2006 |                      | EXAM                    | EXAMINER        |  |  |
| WOLF BLOCK SCHORR AND SOLIS-COHEN LLP<br>250 PARK AVENUE<br>NEW YORK, NY 10177 |               |                      | HUG, ERIC J             |                 |  |  |
|  |               |                      | ART UNIT                | PAPER NUMBER    |  |  |
| ,  |               |                      | 1731                    |                 |  |  |
|  |               |                      | DATE MAILED: 06/21/2006 |                 |  |  |

Please find below and/or attached an Office communication concerning this application or proceeding.

|  |  | Application No   | ,   | Applicant(s)   | -   |  |  |
|--|--|--|---|--|-----|--|--|
| Office Action Summary                                |  | 09/719,029   |   | RAHKOMAA ET AL.  |     |  |  |
|  |  | Examiner   |   | Art Unit   |     |  |  |
|  |  | Eric Hug   |   | 1731   |     |  |  |
| Period fo  | The MAILING DATE of this communication apported by the second section apported by the second section apport  | pears on the cove  | r sheet with the c  | correspondence addre   | ess |  |  |
| WHIC<br>- Exte<br>after<br>- If NC<br>- Failu<br>Any | ORTENED STATUTORY PERIOD FOR REPL<br>CHEVER IS LONGER, FROM THE MAILING D<br>nsions of time may be available under the provisions of 37 CFR 1.1<br>SIX (6) MONTHS from the mailing date of this communication.<br>O period for reply is specified above, the maximum statutory period<br>are to reply within the set or extended period for reply will, by statute<br>reply received by the Office later than three months after the mailin<br>ed patent term adjustment. See 37 CFR 1.704(b).   | ATE OF THIS CO<br>136(a). In no event, how<br>will apply and will expire<br>e, cause the application | OMMUNICATION rever, may a reply be times SIX (6) MONTHS from to become ABANDONE | N. nely filed the mailing date of this comm D (35 U.S.C. § 133). |     |  |  |
| Status   |  |  |   |  |     |  |  |
| 1)⊠  | Responsive to communication(s) filed on 23 M   | <i>1ay 2006</i> .  |   |  |     |  |  |
| 2a) <u></u> ☐  | This action is <b>FINAL</b> . 2b)⊠ This  | s action is non-fin  | al.   |  |     |  |  |
| 3)[  | Since this application is in condition for allowance except for formal matters, prosecution as to the merits is  |  |   |  |     |  |  |
|  | closed in accordance with the practice under the   | Ex parte Quayle,   | 1935 C.D. 11, 45  | 53 O.G. 213.   |     |  |  |
| Disposit   | ion of Claims  |  |   |  |     |  |  |
| 5)□  | Claim(s) <u>1-20</u> is/are pending in the application 4a) Of the above claim(s) is/are withdra Claim(s) is/are allowed.  Claim(s) <u>1,2,4,5,10-15,17 and 18</u> is/are rejected.   | wn from conside  | ation.  |  |     |  |  |
| 7)⊠  | Claim(s) 3,5-9,16,19 and 20 is/are objected to   |  |   |  |     |  |  |
| 8)□  | Claim(s) are subject to restriction and/o  | or election require  | ment.   |  |     |  |  |
| Applicat   | ion Papers   |  |   |  |     |  |  |
| 10)⊠   | The specification is objected to by the Examine The drawing(s) filed on 23 May 2006 is/are: a) Applicant may not request that any objection to the Replacement drawing sheet(s) including the correct The oath or declaration is objected to by the Examine The Specific | )⊠ accepted or b<br>drawing(s) be held<br>tion is required if th                                     | l in abeyance. See<br>ne drawing(s) is obj                                      | e 37 CFR 1.85(a).<br>jected to. See 37 CFR                       |     |  |  |
| Priority (   | under 35 U.S.C. § 119  |  |   |  |     |  |  |
| 12)⊠<br>a)   | Acknowledgment is made of a claim for foreign  All b) Some * c) None of:  1. Certified copies of the priority document  2. Certified copies of the priority document  3. Copies of the certified copies of the priority document  application from the International Burea  See the attached detailed Office action for a list   | ts have been reco<br>ts have been reco<br>prity documents h<br>nu (PCT Rule 17.2                     | eived.<br>eived in Applicati<br>ave been receive<br>2(a)).                      | on No<br>ed in this National Sta                                 | age |  |  |
| 2) Notice (3) Infor                                  | et(s)  Due of References Cited (PTO-892)  Due of Draftsperson's Patent Drawing Review (PTO-948)  The mation Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  The No(s)/Mail Date   | 4)   | Paper No(s)/Mail Da   |  | 52) |  |  |

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#### **DETAILED ACTION**

#### Claim Objections

Claim 5 is objected to because of the following:

The claims recites "An equipment <u>as claimed in the preceding claim</u> ..." (emphasis added). It is assumed this corresponds to claim 4.

## Claim Rejections - 35 USC § 112

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claim 10 is rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claim 10 recites the limitation "the flow  $(L_1+L_2+L_3)$ ". There is insufficient antecedent basis for this limitation in the claim.

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## Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless -

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 1, 2, 4, 5, 12, 13, 15, 17, and 18 are rejected under 35 U.S.C. 102(b) as being anticipated by FI 100168. FI 100168 discloses a method of continuous dilution and mixing of a fibrous suspension. Fibrous stock flows via pipe 10 and is introduced to dilution water pipe 13 via mixing line 16 (see Fig. 1). Turbulent flow is provided in the dilution water just prior to the mixing point using device 18. Device 18 has a smaller cross section than that of the dilution line prior to the mixing point (see Figs. 2 and 3). The cross section is shown in Fig. 8 and 9 as having a wave-shaped form. Dilution water is provided at least in part from white water pit 6. Figure 3 shows the stock and dilution water pipes arranged coaxially. The dilution water pipe also is fitted with so-called form pieces 18c on the inner surface (see Figs. 6 and 8).

### Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

Claim 11 and 14 are rejected under 35 U.S.C. 103(a) as being unpatentable over FI 100168 in view of Kaiser (US 3,812,007). The features of claims 2 and 13, pertinent to claims 11 and 14, are disclosed in FI 100168 as described above. A deaeration tank for the white water is not disclosed. Kaiser is cited here to exemplify the use of a deaeration tank in a short circulation loop of a paper machine for the purpose of providing deaerated stock to the headbox and to assist in flow regulation of stock. It would have been obvious to one skilled in the art to use a deaeration tank in the white water circulation line of FI 100168 for the same reasons.

#### Allowable Subject Matter

Claims 3, 6-9, 16, 19, and 20 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

The claims are allowable for providing a mixing point for the three flows of fresh stock, white water, and a return circulation water.

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

King (US 4,808,007), Smith (US 4,929,088), Glanville (US 5,839,828) disclose static mixers for two or more fluids.

Lumiala (US 6,368,462) discloses in Fig. 4 a dilution header for a headbox having a wave shaped wall.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Eric Hug whose telephone number is 571 272-1192. If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Steven Griffin can be reached on 571 272-1189. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

